ERNST HARTERT'S EXPEDITION TO THE CENTRAL WESTERN SAHARA.*

XIX.

RHYNCHOTA.

ON A REMARKABLE COCCID, WITH BRANCHED ANTENNAE, FROM THE SAHARA.

By E. ERNEST GREEN.

(Plate IX).

I have received, from the Hon. Walter Rothschild, a few examples of a remarkable male Coccid, the unique characters of which necessitate the erection of a new genus.

In such a family as the *Coccidae* it is admittedly dangerous to name and describe a new species (and more particularly a new genus) from the male insect only. But in this case I am confident (from their remarkable structure and from the locality in which they were found) that these males cannot be associated with any known female Coccid. Very few *Coccidae* have been recorded from the region in which these specimens were caught, and amongst these there are none (to the best of my belief) belonging to the subfamily *Margarodinae*, to which this insect is evidently allied. In view of the possible discovery of other congeneric species, I purposely avoid a rigid definition of the characters of the proposed new genus, but rely almost entirely upon the unique structure of the antennae.

Neomargarodes gen. nov.

Allied to *Margarodes*, but differing in the possession of branched antennae in the adult male. Tibia, tarsus and claw of front limb (of male) fused together. Other characters as in *Margarodes*.

Female at present unknown.

Neomargarodes erythrocephala sp. nov.

Adult male (fig. 1) robust: uniformly pale fulvous (in dried examples), with the exception of the large bright red compound eyes, which cover, nearly completely, the area of the head. These eyes meet on the undersurface, but leave a small median interspace on the vertex of the head (figs. 3 and 4). The component facets are isolated, comparatively large, subcircular, somewhat irregular both in size and form. There are about thirty-four facets in each eye. I have been unable to detect any ocelli.

Antenna (fig. 3) with seven joints: first and second approximately equal in size, stout, length not exceeding breadth; fourth, fifth, and sixth cylindrical, approximately twice as long as broad, each joint with a long flattened branch (fully two and a half times as long as the joint itself) projecting from the side; seventh longest, similar in size and form to the lateral branches of the preceding joints; all the joints with numerous short fine hairs, in addition to which there are—on the first three joints—irregular whorls of long stouter hairs, and a few similar long

* See *antea*, vol. xx. pp. 1–163, 444–469, 592–615, and vol. xxi. pp. 204–206.

hairs on the fourth, fifth, and sixth joints. The frons is produced into an obtuse point between the antennae. A single long seta projects laterally from a slight ridge on each side of the median line on the undersurface of the head.

Anterior limb (fig. 5) robust but comparatively short; femur very stout; tibia, tarsus, and claw in one piece, without any trace of division, together shorter than femur, the distal extremity strongly pointed and densely chitinous (see fig. 6), the denser area continued along the outer side to the base of the joint. There are numerous long hairs on the outer side of the coxa and femur and on the inner side of trochanter and tibio-tarsus.

Mid and hind limbs long and slender; tibia more than twice as long as tarsus, with a few longish hairs (fig. 7); claw simple; femur with scattered long whip-like hairs; a tuft of similar hairs on the outer side of the coxa.

Wings hyaline; ample; costal area denser; distal half of costal margin strongly serrate (fig. 2); with two stout nervures and an intermediate fold; a pocket-like lobe at base of inner margin (fig. 8) which engages with the terminal process of the haltere.

Haltere (fig. 8) with a narrowed stalk and a broadly expanded outer area set at an angle with the stalk; distal extremity with a single stout chitinous hooked process.

Abdomen rather abruptly narrowed near the extremity (fig. 9); the penultimate segment exfoliated on the dorsum; the terminal segment consisting of a conical sheath, divided above, for the protection of the eversile penis. There are two transverse series of from seven to nine cylindrical pits, on the dorsum of the sixth and seventh abdominal segments respectively, which give rise to the brush of long glassy filaments shown at fig. 1. Abdominal spiracles well developed; more conspicuous on the posterior segments.

Total length (without appendages), 3 to 4 mm.

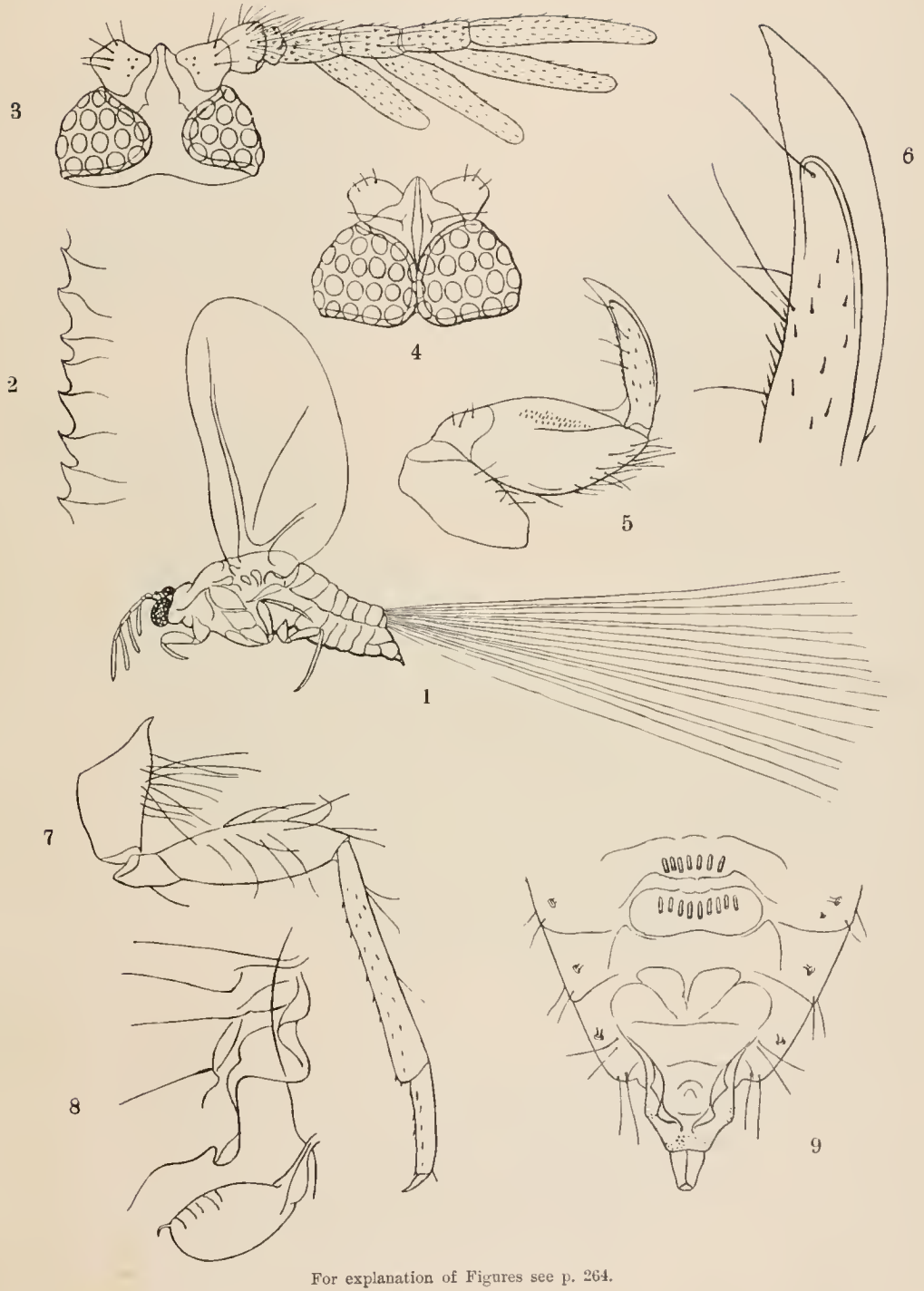
Female and early stages unknown. The fossorial front limbs of the male indicate a subterranean habit in the female. The nymph (as in typical *Margarodes*) is probably attached to the roots of plants, and may be enclosed in a nacreous envelope.

The strongly branched antennae of the male, with the correspondingly increased sensory area, may be a development necessitated by the arid atmosphere of the region in which the insects were captured.

Taken at light, by Dr. E. J. O. Hartert: "El-Meksa (South of El-Golea), Alger. Sahara, 2. iv. 1912."

EXPLANATION OF FIGURES, PLATE IX.

Fig. 1. Adult male, side view, × 13.
„ 2. Portion of costal margin of wing, × 65.
„ 3. Head, dorsal view, × 65.
„ 4. „ ventral view, × 65.
„ 5. Anterior limb, × 65.
„ 6. „ „ distal extremity of tibio-tarsus, × 280.
„ 7. Hind limb, × 65.
„ 8. Haltere and base of wing, × 65.
„ 9. Extremity of abdomen, dorsal view, × 65.



For explanation of Figures see p. 264.